II. *Part of a Letter from the Reverend Mr* Derham *to Dr* Sloane, *giving an account of his obſervations of the weather for the Year 99.*

Upminſter, Jan. 23. $1\frac{699}{700}$.

SIR,

I Here ſend you the Tables of my laſt years obſervations; together with which I think it convenient to ſend ſome few remarks relating thereunto.

I promis'd laſt year the addition of two Columns to each Months obſervations, which are here inſerted. The one ſheweth the *Flying of the Clouds*, concerning which I deſire it may be obſerved, that I have never ſet down the Point towards which the Clouds flew; but when they varied from the Winds. In all thoſe vacancies therefore in the Column of Clouds, it is to be ſuppoſed, that either there were no Clouds at all appeared, or their motion was not diſcernible, or that they flew in the ſame track with the Winds.

Concerning the *Thermometer*, it is neceſſary that I ſhould tell you, that the graduation of it is by Inch-meaſure, *viz.* Inches and tenths of Inches. The point of *Freezing* is at about 8'0, or at moſt 8'2 degrees, and conſequently 'tis *Cold* at about 9'0, and *Temperate* at about 10'0 degrees. I need not ſay, that the Degrees above 100 are *Warm* or *Hot*; and thoſe below 80 are *Harder Froſts*. The Degrees of my Thermometer reach to 24'0, altho I could never make the Spirits deſcend with Artificial Freezing, much lower than 50, neither when expos'd to the heat of a pretty ſtrong Sun, did they aſcend above 225.

The *Scituation* of my *Thermometer* is againſt a Northern Wall in the open Air: whereby it is defended againſt the Heat of the Sun, and ſo ſheweth only the the true preſent Temperature of the Air. 'Tis alſo guarded againſt the Beams of the Morning and Evening Sun, when it riſeth and ſetteth on the Northern ſide of the E. and W. points of the Horizon.

I have thought it unneceſſary for the moſt part, in the Column of *Weather*, to take notice of the Temperature of the Air, whether Hot, Cold, or Moderate, becauſe the Column of the Thermometer ſheweth this. Neither alſo have I ſaid what *Rain* fell, whether much or little, becauſe the Column of Rain ſufficiently demonſtrateth it. So that it is eaſy to obſerve, almoſt at one view, what Seaſons we have had laſt year, whether Hot, Cold, Temperate, Wet or Dry. I need look no farther back for an inſtance, than the laſt Winter-Months, which now, or any time hereafter, we may diſcover to have been very mild, by the Spirits having been for the moſt part above 82 Degrees. Yea, many of the days of *November* and *December*, we may find were not much colder than many of the mornings and evenings of the warmer Months. So alſo for *Wet* and *Dry*, we may find what reaſon there is for the preſent great ſcarcity of Water, which is complained of in many places. For beſides what happened in former Months, the two laſt Months of the Year were much dryer than uſual, ſo that had it not been for the rains of *October*, perhaps a drought had been a General calamity.

I have had frequent confirmations of what I obſerv'd laſt year, (*Phil. Tranſ.* N. 249.) concerning the *Mercury* riſing in Foggy weather. The like it doth alſo in miſling weather; as may be ſeen in divers places of the Table.

I obſerved laſt year, that the higheſt pitch I ever found the Mercury at, was 30,40 inches. But *Dec.* 22. laſt, the Weather being miſling, and Wind Northerly, it aſcended to 30,50 inches, the higheſt I ever ſaw it at *Upminſter*.

Whether the obſervations my Regiſter is filled with, will be of any uſe, to judge of the Fertility or Scarcity, the Healthineſs or Diſeaſes, or any other occurrences of the laſt, or of former or future years, I ſhall leave to the much better judgments of the learned Members of your Honourable Society, who have been pleaſed to accept of my paſt labours of this kind, and by their deſires to command my continuance of the ſame for the future. Whether what I have done may anſwer your expectations, I am not able to judge. I can only aſſure you, that it is done with all poſſible accuracy and fidelity.

I beg pardon for the chaſms which you will meet with in ſome of the months, occaſioned by my abſence from my obſervations about neceſſary affairs. I am

SIR,

Your moſt Humble Servant,

W. Derham.

A REGISTER of the Weather, Bearing of the Winds, Flying and the Quantity of Rain fallen at Upn

January. 8, 12, 9.

Day	Weather	Winds	Clouds	Barom.	Ther	Rain.
1	Froft	S E b. S o		29. 77		
	Fair	S S E 1		73		
	Snow			43		
	----Rain----					
2	Warmer	S 3		21		o. 63
	and Rain	S b. E 3		28. 76		o. 29
3	Same	S 3	S by W	57		o. 37
		S b. W 3		47		
4	Cloudy	S S W 3	SW by W	44	110	
	Fairer	S W 4		56	109	
		S W 4		72	108	
5	Froft	S W 3		29. 22	85	
	and	S 1		29	94	
	Fair					
6	----Rain----	S o		28. 67	104	o. 75
	Rain			61	105	
	Warm					
	Snow	S 5				3. 48
7	ſmallFro.	S W 2		29. 00	85	
	Fair	SWb. W 3	S by W	08	86	
	Rain	S by W o	S W	19	85	o. 03
8	Froft	S W o	W S W	34	85	
	and	W by S 1	S W	44	88	
	Fair			70	88	
9	hard Fro.			72		
	and					
	Fair			73		
10		E by S 1	E S E	82	85	
	Same	S E by E 2		82	89	
				60		
11	----Rain----	S W 2	W S W	59	101	o. 40
	Cloudy	SWb. W 2	W	59	99	
				71	102	
12	Cloudy	SW by So		69	103	
		S W 2		66	109	
	Misling		W by S	59	101	
13	----Rain----					
	Fair	SWb. W 3	W	48	93	o. 16
		W by S 3	W by N	42	107	
	Cloudy			48	93	
14	Fairer	N by W 4	N by W	53	94	o. 14
	Cloudy			97	96	
	----Rain----					
15		N 1		30. 12	90	o. 16
	Cloudy	N by W 1		14	94	
	Day			17	82	
16	Froft	W by So	N by W	10	81	
	Cloudy			15	93	
17		NWb. W o		22	94	
	Foggy	N W o		24	100	
				27	94	
18	Fog	W o		26		
19	Fog					
				34	77	
20	hard Fro.	S o		27	70	
	Fair	S by E 1		24		
	Foggy			21	76	
	hard Fro.	S by E o		18	62	
		E by N	E N E		80	

February. 7, 12, 9.

Weather	Winds.	Clouds.	Barom.	Ther	Rain.
Fair	S W 1		29. 43	98	
Pleaſant	W by S 2	S W	53	108	
Day	W by S o		77	83	
SmallFro.	W S W o	W N W	88	79	
Hazy	S by W o		91	95	
Rain	S 1		85	100	o. 05
Rain	S S E 3	S by E	59	100	
	S by W 3	S W	51	105	
Fair	SWb. W 1		64	92	1. 05
SmallFro.	W S W 1	W N W	74	82	
Fair	W 2	N by W	80	101	
Cloudy	S 1	S W	73	89	
----Rain----					
Cloudy	SWb. W 3	W S W	48	104	o. 37
Fair	W S W 3	W	51	113	
Rain	W by S 3	W	48	91	
SmallFro.	W by N 1		76	85	
Fair					
Rain			52	93	
Violent	W 8	W by N	28. 99	103	1. 52
Storms	W NW 10	N W	29. 22	101	
			78	92	
Cloudy	N W o	NWby N	98	88	
Fair	S by W 1	N W	30. 00	101	
Cloudy			29. 88	99	
Miſling	W SW 3	W by N	79	106	
Fair			30. 07	87	o. 20
Hoar Fro.	S W 2	N N W	02	88	
ſomewhat	W 3	N	03	109	
Fair			01	95	
Cloudy	W by S 1	N W	29. 98	87	
	S W 2	W by N	99	107	
Fairer			98	96	
Fair	S W 2	N by W	94	84	
Hazy	S W 3	N W	84	102	
Clou. Rain	5		46	101	
	Weſt 4	W	34	107	o. 02
----Rain----					
Cloudy	E by N 2	N E	37	10:	1. 50
			52	97	
	E by N o		76	93	
Cloudy	E by N 1	W by S	82	105	
----Rain----			83	94	
Fair and	W N W 1		84	91	o. 09
Pleaſant	N W 1		93	110	
			80	99	
----Rain----	W by S 3		71	87	o. 13
Fair	W by N 4		77	104	
			94	90	
Froſt	W S W 1		30. 00	82	
and					
Fair			29. 98	97	
Cloudy	W S W 1	W N W		94	92

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Weather	Winds.	Clo
Fair		
Sleet	N by E 2	
Snow	N by W 3	
Fair		
Hard Fro.	N Wb. No	
Fair	W 1	
Cloudy	W by S 1	N
Cloudy	N by W 2	N
Rain	N 2	
Cloudy	N 2	
Froſt	N W o	N
Cloudy	N by E 1	N
Fairer	N by Wo	
Hard Fro.	N N W o	
Fair	E 1	N
Cloudy	S by E o	
	S E 1	S
Fair	S E by S 2	S
Cloudy		
	E S E o	N
Fair	E by N 2	
Froſt	N E o	
and	E N E 2	
Cloudy		
	N by E o	E
Cloudy	N by E 1	
Small	E by N o	
Rain	S by W 2	S
	S 1	
Cloudy	S by W 1	
Rain	S by W 1	
	S by E 1	
Fairer		
Froſt	W o	
Fair		
Cloudy		
	SW by S 2	V
Cloudy		
Cloudy	S W 1	V
Fair	S W 2	
Cloudy		
Fair	S 2	S
Hail		
ſmall Fro.	S W o	
Fair and	W 2	
Pleaſant		
	SW by S 3	
Cloudy	S W 4	
----Rain----		
Cloudy	SWb. W 3	
Fair	W by S 4	V
Cloudy		
Fair	S W 3	V

lying of the Clouds, Height of the Mercury in the Barometer, and of t
Upminster, *in* Essex, *for the First Six Months of the Year* 1699.

March. 6, 12, 9.

inds.	Clouds.	Barom.	Ther	Rain.
by E 2		29. 26	86	o. 12
by W 3		40	82	
		64	80	o. 04
Wb.No		72	68	
1		77	96	
by S 1	N W	78	96	
by W 2	N N E	82	93	
2		91	98	
2		30. 02	90	o. 02
W o	N	11	79	
by E 1	N by W	15	94	
by W o		19	77	
N W o		11	65	
1	N by E	07	96	
by E o		29. 95	87	
E 1	S by E	82	82	
E by S 2	S E	83	107	
		88	89	
S E o	NE by E	97	82	
by N 2		30. 05		
		11	85	
E o		12	80	
N E 2		13	98	
		14	87	
by E o	E	10	85	
by E 1		11	103	
		08	91	
by N o		00	86	
by W 2	S	29. 97	102	
		93	92	o. 41
1		84	93	o. 18
by W 1		84	106	
		78	97	
by W 1		63	93	o. 01
by E 1		58	102	
		69	88	1. 68
V o		80	81	
		84	108	
W by S 2	W by S	87	107	
		30. 02	116	
S W 1	W S W	04	112	
S W 2		02	127	
		29. 99	110	
S 2	S by W	84	108	
		30. 12	92	o. 05
S W o		19	78	
W 2		22	112	
		09	94	
W by S 3		29. 88	98	
S W 4		77	115	
		60	103	
Wb.W 3		47	101	o. 05
V by S 4	W S W	54	118	
		48	100	
W 3	W by S	38	90	

April. 6, 12, 9.

Weather.	Winds.	Clouds.	Barom.	Ther	Rain.
Rain	W by N 1	N W	29. 37	93	
and	N 4		39	102	
Hail			52	98	o. 27
	N N W 3		50	92	
Same	N 2		53	102	
	N by E 2	N E	61	95	o. 14
	N 2	N E by N	63	88	
Cloudy	NE b. N 3		67	108	
	N by E 3	N E by N	79	93	
Fairer	N by E 3	N E	85	90	
Day	N E 4		90	107	
	N by E 2		91	86	
Frost and	N by E 2		83	82	
Fair	N E 2		75	109	
Cloudy			69	95	
	E by N o	N	55	92	
Cloudy	E S E 1	S	46	112	
			43	95	
Cloudy	SE by E 1	S E	37	85	
Cold	E 2		36		
Fair			28	98	
Cloudy	N 2		17	98	
wth some	N by W 1		12	103	
Drops			17	98	
Cloudy	S o	N W	13	97	
	S 1	S W	15	115	
Rain			16	97	o. 52
Fair	S by W o	S W	23	93	
	S 1		31	124	
Cloudy			43	104	
	N 1		46	99	
Rain	N 3	N N E	48		
			52	101	o. 07
	N E 3		59	103	o. 35
Cloudy	N E 4		70	113	
			83	99	
Cloudy			90		
Fair	N E				
Cloudy			86	97	
Cloudy	NE by E 3		82	104	
Fair	E N E 3	E	83	121	
Rain			76	108	o. 19
Cloudy	NE by N 1	E	64	105	o. 05
Rain	S W 1	S W	61	118	
Fairer			61	101	o. 97
Cloudy	S by W 1		58	101	
	S 1		50	129	
Fair			36	103	
Rain	W S W 2		21	103	
Fair			25	99	o. 21
Hoar Fro.	S W 1		34	85	
Fair					
Rain	S 1		34	100	
Fairer	E 2		28	103	o. 02
	W by N 1		42	125	
Cloudy			65	110	
Hoar Fro.	W o		72	89	
Fair					
			84	115	
Cloudy	S S W 1	S W	87	110	

May. 6, 12.

Weather.	Winds.	Clouds.	Barom.	Ther	R
	W by S 1	N W	29. 84	112	
Fair	N W 1			138	
Fair					
Dry					
Rain	S by W 3		65	113	
Cloudy	SW b. W 2		47	120	o.
	W S W 3		38	133	
Showers	W 3		35	106	o.
Fair	S W 1		34	105	
Rain			11	99	o.
Fair	W by S 2		17	90	
Thunder	S W 1		31	118	
Rain			40	98	o.
Hoar Fro.	S S W 1		51	92	o.
Fair	S W 3		58	121	
Shower			69	107	o.
	S by W o		79	98	
Fair	S by E 2	S	81	137	
			87	108	
	S 1		90	102	
Fair	S 2		93	143	
Fair					
and					
Warm	E 1		93	115	
	N E 1		90	92	
Same	N by E 1		88	147	
			92	118	
	N by E 3		30. 00	117	
Same	N 2		10	150	
			21	108	
Fair	N by W 2		17	105	
and	N 4		14	132	
Dry			10	108	
	N by E 3		10	110	
Same	N N E 4		08	137	
			06	109	
Cloudy	N N E 2		05	110	
	N by E 2				
Fair	E 1	N N E	01	112	
	E N E 1	N E	29. 99	110	
Same					
			92	100	
Cloudy	NE by E 2	E N E	88	108	
Fair	E N E 3		87	131	
Cloudy			83	110	
	E N E 3		76	113	
Cloudy	NE by E 3		72	137	
			71	113	
Fair and	NE by N 2		69	115	
Hot Day					
			77	124	
	N 2	N by E	80	113	
Fair	NE by E 3		83	146	
	E by S o		86	115	
	N E 2		86	110	
Same	E by S 2		86	143	
			83	110	
Cloudy	N N E		80	112	

6, 12, 9.			June				6, 12, 9.	
h.	Ther	Rain	Weather.	Winds.	Clouds.	Barom.	Ther	Rain.
84	112		Very Dry	S W 2	W by S	30. 08	132	
	138		Hot Day					
						00	138	
			Fair	S W by So	S W by S	29. 91	132	
65	113		Rain			85	134	0. 01
47	120	0. 34		W 2		90	123	
38	133							
35	106	0. 19						
34	105							
11	99	0. 88						
17	90							
31	118							
40	98	0. 29						0. 01
51	92	0. 08	Fair					
58	121		and					
69	107	0. 01	Dry	W by S 2		72	120	
79	98			W by S 3	W by N	78	121	
81	137			W 2		82	142	
87	108							
90	102							
93	143							
			Great					
			Drought					
93	115							
90	92		Cloudy		N W			
88	147			W by N 2	W by N	67	146	0. 53
92	118		Fair	W 0		73	125	
00	117		Fair	W by S 1		79	126	
10	150		Hot					
21	108		Cloudy	E 0		87	128	
17	105		Hot and	E 1	W by S	86	138	
14	132		Very Dry					
10	108			E by S 0		81	136	
10	110		Fair	E 1		76	131	
08	137			E by S 1	S E by S	71	158	
06	109		Rain	S 1	S by E	70	138	0. 04
05	110			S S W 3		80	126	
	5			S by W 4	S W by S	92	154	
01	112							
99	110							
92	100							
88	108							
87	131							
83	110							
76	113							
72	137							
71	113							
69	115							
77	124							
80	113							
83	146							
86	115							
86	110		Some					
86	143		Cloudy	W N W 1		88	148	3. 61
83	110		some Fair	W N W 0	NW by N	92	128	
80	112			W 0	N N W	95	130	

20	Fair	S by E 1		24			and								Fair				
	Foggy			21	76		Fair			29.	98	97			Cloudy				
	hard Fro.	S by E 0		18	62		Cloudy	W S W 1	W N W		94	92			Fair				
21	Fog	E by N 1	E N E	18	82			W by N 2			92	110							
	Fair			18	81		Fairer				91	90			Rain				
	Froſt	E by N 1		16	77		Cloudy	W by S 2	W N W		81	84			Hoar Fro.				
22	and	E by N 2	E by N	18	86		Sleet	N W 3			72	100			Fair				
	Fair			19	84		Cold				75	79	0.	09	Cloudy				
	Cloudy	N E 2		15	87		Hard Fro.	N W 2			83	75							
23	Fair						Fair								Rain				
	ſmall Fro			13	81		Sleet				59	86							
	Froſt	E by N 0		13	73		Cloudy	N N W 6			60	92	0.	40	Cloudy				
24	and	E 2		14	88		Bluſtring								Fair				
	Fair			12	78		Fairer				91	85			Thunder				
	Froſt and	E 0		11	73		Fair	NW by W 1			90	83			----Rain----				
25	Fair Plea-	E 1		12	86			SW b. W 1	N W		82	102			Cloudy				
	ſant Day			09	79		Cloudy				75	96			Fair				
		E 0		05	70		----Rain----												
26	Same	E 1			88		Fair and	W 1	W N W		77	86	0.	08	Hoar Fro.				
				29. 96			Pleaſant	W by N 1			83	105			Fair				
											77	95			Rain				
	Froſt and	E N E 0	E	76	76		Rain	W by S 2	W by N		64	99			Fair				
27	Cloudy	E by N 1		72	85			NW b. W 3			67	103			Rain and				
	Fair			59	76		Fajr				71	92	0.	45	Hail				
	Rain	S E 2	S E by S	48	89		Cloudy	S W 3	W		58	93			Rain				
28	and	S by E 2	S	47	92														
	Thaw			66	93	1. 51							0.	10					
	Froſt	S W by S 0	W by N	86	85										Fair				
29	Fair	S 1		87	92										Rain				
	Rain			72	98										Fair				
	Cloudy	S 2	S	56	107	0. 82									Cloudy				
30	Warm	S 3	S by W	49	115														
	Day	S S W 3	S W by S	42	109										Fair				
	Cloudy	S by W 2	W S W	49	108	0. 17									Cloudy				
31		S 3		37	113										Fair				
	Rain	S S E 2	S S E	47	109	8. 91						Tot	6.	05	Rain				

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W b. W 3		47	101	0. 05	Hoar Fro.	W 0			72	89			N E 2			86	110	
W by S 4	W S W	54	118		Fair							Same	E by S 2			86	143	
		48	100						84	115						83	110	
W 3	W by S	38	99		Cloudy	S S W 1	S W		87	110		Cloudy	N N E 1			80	112	
					Warm &	S W 2			94	131		Hot and	E by N 2			76	148	
		49	96	0. 25	Fair				98	115		Fair	N E 3			75	120	
W S W 1		50	82		Cloudy	W SW 0	W		99	97		Fair	N E 2			72	112	
W 2	W	53	113			W by S 2		30.	00	130		Hot and						
		53	96		Fairer			29.	97	110		Dry				66	115	
by E 3	S by W	40	101		Fair	SW b. W 2			96	104		Cloudy	NE by N 1	N by E		66	109	
3		32	118		and	W SW 3	N W		97	131			E 1	N		59	134	
		23	113	0. 66	Pleasant				88	113		Fair	E 1	W		49	145	
by W 2	S S W	07	100	0. 57		S S W 3	W S W		74	109		Rain	N N E 3	N by E		43	117	
4		06	119		Fair												113	
		01	100						60	110		Fair				50	106	0.
W 3	W	19	99	0. 59	Fair	SW b. W 3	W		64	102		Fair	N N W 2	N by W		53	102	
W 2		31	117									Hail	N by W 3			55	120	
		38	94		Rain				37	105		Fair	E by S 0			57	107	0.
W 0		39	82		Fair	SW b. W 4	W		12	109	0. 71	Fair	E by S 1	N by W		55	104	
by. W 2		41	117			W 4			15	123		Rain	S W 2	W by S		57	132	
		46	102	0. 25	Cloudy				14	100		Fairer	W 0			62	113	0.
0	W S W	48	86		Fair	S W 1			23	91		Fair	S W 1			65	109	
0		50	121		Rain	W by S 1			31	124		Cloudy	S W 1	S		67	140	
		54	98	0. 41	Cloudy				41	105	0. 01	Fair	S 0			66	118	
S E 0		63	92		Fair	W by N 1	N by W		52	89		Fair	E 1	S E		61	122	
N W 1		71			Drops of	N 2			64	122			E 2	S		57	150	
					Rain	E 1	E by N		77	101		Sultry	E 0	E S E		58	131	
					Hoar Fro.	N E 0			81	92		—Rain—	E 0	N W		63	124	0.
					Fair	E 1	N by E		81	129								
		33	96	0. 10	Cloudy	E 0			79	104								
by S 1	W	30	93		Cloudy	E 0	N by W		78	106								
S W 3		23	112		Fair	S by W 1	NW by W		79	135								
		20	96		Cloudy,	NE by N 0			81	117								
NW 4		20	99	0. 24								Hot						
N W 6		29	102									and						
W 2		43	96	5. 63						Tot.	3. 44	Dry	W by S 2		30.	08	140	2.

86	110		Some							
86	143		Cloudy	W N W 1			88	148	3.	61
83	110		some Fair	W N W 0	NW by N		92	128		
80	112			W 0	N N W		95	130		
76	148			S 1	N W		98	163		
75	120									
72	112									
66	115									
66	109		Fair							
59	134		Hot	S E 1			93	165		
49	145		Day				93	141		
43	117		Fair	S E 1			94	140		
	113		Sultry	N by W 1	W		94	165		
50	106	0. 08	Rain	E 1			93	140	0.	20
53	102		Fair	E 0	W by N		89	140		
55	120		Hot	W by S 1			87	166		
57	107	0. 61	Day	SW by W 2			82	144		
55	104			W 2	W by N		76	142		
57	132		Fair							
62	113	0. 10		N W 2			84	134		
65	109			N W 2	N W by N		98	130		
67	140		Same	S 2	W	30.	01	158		
66	118					29.	96	125		
61	122			W S W 2	W		90	133		
57	150		Same	W N W 2	W		91	161		
58	131						92	125		
53	124	0. 09		W N W 2			96	118		
			Same	W by S 1			99	143		
							99	135		
				N W b. W 1	N W		99	135		
			Same	N W b, W 3			97	162		
				E 1	N		97	139		
8	140	2. 67						Tot.	4.	40

hiloſoph. Tranſact. Numb. 262 Tab. 1.

A REGISTER of the Weather, Bearing of the Winds, Flyin and the Quantity of Rain fallen at U

July. 6, 12, 9.

Day	Weather.	Winds.	Clouds.	Barom.	Ther	Rain
1	Milling	NE by E 1		30. 00	134	
	Hot and	E S E 2	N	00	150	
	Fair			29. 97	122	
2	Fair	E S E 1		96	125	
	and	N E 2		92	150	
	Hot			87	124	
3		E 1		83	131	
	Same	E 2		82	157	
				78	129	
4	Fair	E by N 1		74	120	
	Cloudy					
	Fair	NE by N 1		80	135	
5	Fair	N 2		85	123	
		N 2	N N E	87	150	
	Cloudy			90	125	
6		N by E 1		90	120	
	Cloudy	N N E 2		90	143	
				86	115	
7		NE by No	E by N	84	120	
	Fair	E 1		81	147	
				78	125	
8	Fair	E by S 1		79	116	
	and	W N W 1	W by N	82	165	
	Hot	NW b. No		90	143	
9		N by W 1		30. 01	132	
	Same	NW b. W 1	N W	03	153	
				04	131	
10				01	119	
	Same	W		29. 88	147	
11	Hot and	W by S 2		89	140	
	Dry	W by N 2	N W	89	162	
				92	143	
12	Sultry	E by N o		97	140	
	Hot	E N E 1		97	178	
	Cloudy			97	143	
13	Very Hot	E by S o		96	133	
	and	E S E 1	S by E	97	173	
	Dry			90	142	
14	Sultry	E 1		87	136	
	Rain and	E by S 2	E by N	88	164	
	Thunder			91	139	0. 64
15	Cloudy	NE b. N 2		93	136	
	Fair and	N E 3		90	164	
	Dry			87	136	
16	Fair	N E 2		87	140	
	Hot and	E 2	N E	88	172	
	Dry			89	134	
17		E by N o		91	138	
	Same	E by N 2		93	167	
				99	131	
18	Cloudy	N by E 3		30. 03	130	
	Cool	N 2		06	142	
	Day			06	127	
19		N 2		01	126	
	Same	N 1		29. 98	138	
				92	123	
20	----Rain----	N N W 2		86	115	
	Cloudy	NW b. N 2		86	139	
	and			86	136	0. 06
	Cool					

Auguſt. 6, 12, 9.

Weather.	Winds.	Clouds.	Barom.	Ther	Rain.
Fair	S by W 4	S S W	29. 32	128	
Rain	SW by S 4		33	145	
Cloudy	S W 8		36	130	0. 07
Fair	W by S 1		62	118	
	W S W 1	W by S	70	142	
Cloudy			63	131	
Cloudy	N N W 1	W S W	56	123	
Fair			72	117	
Cloudy	N N W o	W by S	75	105	
Fair	E by S 2	W by N	71	147	
Rain			50	123	
Rain	E by S o	S W by S	37	125	4. 38
	S W 1	W	31	139	
Fairer			63	127	0. 46
	S o		67	125	
Showry	S 2		59	139	
			50	139	0. 08
Fairer	S W 4		39		
Rain			32	126	
Fair	S W 4		30	118	0. 75
	S W 3		33	141	
Rain			55	117	0. 66
	S W 2	W S W	63	116	
Fairer	SW b. W 3		66	145	
			69	125	
Fair	SW by S 3		70	119	
	S W 3		72	150	
Cloudy			72	131	
Fair	S 1	S S W	65	116	
	S 3		58	152	
Cloudy			43	137	
----Rain----	N W 1	W by S	49	117	
Fair	W by N 3		57	140	
			65	120	0. 44
Cloudy	S S W 3	N W	67	120	
Rain			65	132	
Cloudy	S W 2		61	131	0. 17
	W by S 2	N W	69	153	
Fair			73	134	
Fair	W S W 2	W by S	73	139	
	W S W 3		72	158	
Rain			75	122	0. 44
	N W 1		87	110	
Fair	NW b. N 2		98	132	
			30. 00	111	
Fair	N N W 1		29. 98	108	
Cloudy			30. 00	116	
	N by W 1		01	110	
Cloudy	N 2	N N E	03	138	
			02	115	
	N 2		29. 97	116	
Cloudy	N by E 2	N N E	92	142	
			87	124	
Cloudy	N N E 1		82	119	
Fairer	NE by N 2		80	140	
Cloudy			76	127	

S

Weather.	Winds.
Miſt	S W o
	SW by S
Fair	S o
	S E o
Cloudy	
	S S E o
Same	N W 2
	NE by N
Fair	N 2
Miſt	N o
	E 1
Fairer	
Miſt	E o
	E S E 1
Fair	
Miſt	E o
Fair	N E 2
Cloudy	
Milling	N by E
Fair	E N E
Cloudy	
	N 1
Fair	
	E o
Fair	E 2
Miſt	E o
	E 1
Fair	
	E o
Same	E 1
Miſty	E o
ſomewht.	E by N
Cloudy	
Miſty	E o
leſs	
Cloudy	
	S W 1
Same	
Very Dry	
Rain	SW by
	S S W
Cloudy	
	E o
Rain	S W 1
	W by
Fair	W N W
Rain	S S W
Cloudy	
Rain	S by
	SW b
Cloudy	

Flying of the Clouds, Height of the Mercury in the Barometer, and of ut Upminster, *in* Essex, *for the Last Six Months of the Year* 1699

September 6, 12, 9.

r.	Winds.	Clouds.	Barom.	Ther	Rain.
	S W o		29. 84	98	
	SW by S 2	S	85	145	
	S o		80	122	
	S E o	S by E	77	112	
			77	130	
	S S E o	S	67	122	
	N W 2	NW by N	65	144	
			72	120	
	NE by N 1	S S E	90	108	
	N 2	N by W	18	138	
			30. 12	115	
	N o	E	17	96	
	E 1		18	139	
			15	112	
	E o		07	92	
	E S E 1	E	03	142	
			01	115	
	E o		03	97	
	N E 2	NNE	06	147	
			15	131	
	N by E 2		21	123	
	E NE 3	NE	22	137	
			22	121	
	N 1	NE by N	18	116	
			12	115	
	E o		10	97	
	E 2		08	142	
			05	121	
	E o		29. 95	110	
	E 1		94	150	
			91	121	
	E o		89	102	
	E 1		90	152	
			90	127	
	E o		91	114	
ht.	E by N 1	E	93	143	
y			93	129	
	E o		89	126	
			89	127	
	S W 1	SW by W	91	122	
Dry					
			93	134	
	SW by S o		92	128	
	S S W 1		92	140	
y			81	122	o. 15
	E o		59	112	
	S W 1		50	141	
			60	116	2. 36
	W by S 2	N W	82	102	
	W N W 2		88		
			91	106	
	S S W 2	W	80	115	
y			65	130	o. 01
	S by W 3		41	127	
	SW by S 4	S by W	42	125	
w			36	115	o. 24

October. 6, 12, 9.

Weather	Winds.	Clouds	Barom.	Ther	Rain.
Fairer	E by N 1	E	29. 97	122	
	E 2		93	132	
Cloudy			93	123	
Rain	E by N 2		87	118	
	E by N 1		80	131	
Fairer			73	111	1. 45
----Rain----					
Fairer	E by S 1	S S W	66	115	1. 92
Cloudy	S W 2		67	128	
			73	118	
	S W o		79	108	
Cloudy					
Fair			98	96	
Hoar Fro.	N N W 1		30. 12	87	
and	N 1		17	112	
Fair			22	89	
	N W o		18	99	
Cloudy	W by N 1		19		
----Rain----			20	96	
	NE by N 1		21	105	o. 07
Cloudy	E by N 1		20	119	
			16	110	
	E o		07	106	
Same	E by N 2		06	119	
			01	99	
Mist	E by N o		29. 92	92	
Fair			85	104	
Mist	E 1		80	99	
Cloudy					
Misling			80	120	
Mist	SE by E o		75	609	o. 42
Warm	S 2		77	140	
Fair			79	115	
Cloudy	S o	S by W	77	106	
and	SW by S 3		79	136	
Warm			87	119	
	S by E 2		87	119	
Same	S 2		81	133	
			65	122	
Cloudy	S 3	S S W	57	129	
Misling	S 2		57	136	
Rain			54	127	
	E S E 2	S E by S	52	122	
Rain	S E 1	S by E	48	130	
			50	122	o. 64
	E 1	S E	50	117	
Fair	E 1	S E by E	56	130	
			61	111	
	N E 2		65	118	
Cloudy	E by N 1		65		
			66	119	
	N E 2		68	116	
Same	E by N 3		71	123	
			74	114	
Cloudy	E 3		75	111	
and	E by N 3		80	111	
Cool					

November. 8,

Weather	Winds.	Clouds	Barom.	T
	W 3	W S W	29. 29	
Fair	W by N 4		42	1
			67	
----Rain----				
	SW b. W o	W by S	80	1
Fair	S by W 2	S W	85	1
Cloudy			84	1
Fairer	S 3		53	1
	S 6	S by W	52	1
Rain			60	1
	S W 3	W S W	85	
Fairer			92	1
			96	1
Fair	S W 3	N N W	98	1
Cloudy	S W 2	W	30. 01	1
Fair			03	1
	S S E o		02	1
Fair	S S E 1	S	02	1
			29. 97	
Misty	S S W 2		30. 02	1
Fair			22	
	W o		27	
Mist	W 1		27	
			30	1
	S by E 1		29	1
Cloudy	S E 1		28	1
			22	
Frost	E 1		16	
and	E 1		18	1
Fair			27	
	N o		31	
Foggy	N by E o		30	1
			33	
Mist	N N E o	S W by S	30	
	E by N o	SW by W	30	1
Cloudy			23	1
Cloudy	S W 1	W by N	09	1
Fair	S W 3		03	1
Cloudy			29. 85	1
Fair	W S W 1		76	1
	W S W 4	N W	70	1
Stormy	W S W 8		36	1
Cloudy	W 6	N W	53	1
	W by N 5	N W	63	1
Fair			84	
	W by S 1	W N W	87	
Fair	W S W 2	W	88	1
			80	1
	N W 3	W	86	1
Fair	W 1		93	1
			91	
Frost	W S W 3		81	
	W S W 3		87	1
Fair			94	
Frost	S by W o	N W	94	
and	S 1		94	
Fair			91	
	S 1	S W	85	
Same	SW by S 2		85	1

...nd of the Spirits in the Thermometer, 1699.

		8, 12, 9.		December.			8, 12, 9.	
	Barom.	Ther	Rain.	Weather	Winds	Clouds.	Barom.	Ther	Rain.
9.	29	95		Cloudy	N N W o		29. 71	73	
	42	103		Hard Fro.	N W o		71	76	
	67	99		Fairer			58	60	
	80	106	o. 28	Froſt	E by S 3		30	78	
	85	116		Cloudy	E 4		12	82	
	84	109		Snow			28. 91	83	
	53	105			E 3		61	91	
	52	119		Rain	E by S 3		52	94	o. 56
	60	102	o. 36				44	100	
	85	96		Cloudy	E S E 3	S S E	60	98	o. 18
	92	112		Fair					
	96	111		----Rain----			74	99	
	98	107			S by E o	S by W	29. 91	99	o. 13
o.	01	120		Fair	S 2	S S W	14	110	
	03	112		----Rain----			28	103	
	02	100		Fair	S 2		26	107	
	02	115		Rain and	S by E 3	S by W	32	115	o. 74
9.	97	97		Warm			39	108	
o.	02	110		Cloudy	S 1		50	106	
				and			48	112	o. 30
	22	94		Warm			48	105	
	27	84		Cloudy	S S E 1	S by E	37	109	
	27	98		Miſling	S S E 3		32	116	
	30	101		Warm			36	114	
	29	100			S E 3		19	113	
	28	107		Rain	S S E 3		19	117	
	22	87					29	112	o. 38
	16	80			S by E 1		41	103	
	18	103		Fair	S by E 2		46	112	
	27	92					57	98	
	31	87		Fair	S W o		88	92	o. 06
	30	101		Cloudy					
	33	96		----Rain----			95	108	
	30	94			S by E 2	S by W	84	109	
	30	104		Cloudy and	S 1	S W	78	115	o. 36
	23	103		ſome Rain			73	108	
	09	103		Cloudy	S W 3		54	110	
	03	110			SW*b*.W 3		57	112	o. 61
9.	85	109		Fair			63	104	
	76	103	o. 20		S W 1	W by S	51	102	
	70	110		Rain	W by S 1		43	108	o. 21
	36	114					48	98	
	53	109		Fair	W by N 2	N N W	64	100	
	63	115			N N W 1		69	103	
	84	94		Cloudy			91	99	
	87	89		Miſling	N N W 1		30. 07	95	
	88	105			N 1		14	101	
	80	113		Fair			27	87	
	86	103		Froſt and	N o		25	73	
	93	105		Fair	S W 1		20	88	
	91	85		Rain			33	90	o. 20
	81	92		Froſt	N W 1		44	82	
	87	107		Hazy					
	94	94		Fair			35	76	
	94	79		Cloudy	W 1	N W	21	81	
	94	97		with	N W 1		20	93	
	91	92		Thaw			23	91	
	85	88		Cloudy	N W o	N	26	86	
	85	106			N W 1		27	102	

					92	123						87	124			Cloudy			
	----Rain----																		
	Cloudy	N N W 2			86	115		Cloudy	N N E 1			82	119			Rain	S by		
20	and	NWb.N2			86	139		Fairer	NE by N2			80	140				SW b		
	Cool				86	126	0. 06	Cloudy				76	127			Cloudy			
	Cloudy	N N W 1			87	126			N E 1	E by N		70	117			Fair	W S		
21		N N W 1	N N E		87	155		Fairer								Cloudy	S by		
	Fair	S 1			83	134						56	129			Rain			
	Fair	W by S 1			81	122		Mist	N N E 0			50	126			Fairer	S W		
22		N W 1			80	159			W by N1			53	150			Rain	SW b.		
	Cloudy	S E 0			78	135		Fair				59	122			Stormy			
	Fair	S E 1			78	131		Misty	S by W 0	S		63	118			Fair	S W		
23	Some	S 2			74	172		Fair	S 2			64					SW b		
	Drops				73	139		Cloudy				56	128			Cloudy			
	Fair	S W 1			71	128		----Rain----								---Rain---			
24	Rain	S W 2	W		67	160		Cloudy	S 1	S by W		47	129	0. 24		Fairer	W by		
	Fair				58	129	0. 01		S by W 3			43	148				W by		
		S S E 1	S		37	129		Rain				37	127	0. 21		Rain			
25	Rain				21			Cloudy	S W 1	W		41	119				W by		
		S 1			17	129	1. 89		S W 3			53	149			Fair			
	Fairer	S 1	S W		21	118		Fair				64	124						
26	Rain		S S W		24	156		Fair	S W 1	W by S		71	116			Milling	S W		
	Fair	S 2			25	129	0. 23		S by E 2			68	137				W N		
		S by W 2	S W by S		11	128		Rain				63	136	0. 58		Cloudy	N by		
27	Same	S 4	S S W			153		Fair	SW by S2			67	120				E S		
					18	128	0. 21		SW by S3			65	143			Fair	E by		
	Fair	S 1			24	125		Cloudy	S 4	S S W		45	128						
28		S W 4	S S W		27	147			S W 5	S W by W		48	118			Fair	N by		
	Rain				28	129	0. 34	Fair	W by S 5	W N W		59	140				N by		
	Fair	S by W 3			30	129			W S W1	W		80	117			Small			
29	Rain	SW by S4	S W		29	148		Fair	S W 0	W		86	112			---Rain---	E 0		
	Thunder				35	124	2. 21	Rain	S W 1			89	129	0. 12		Fair	E by		
		SW by S3	S W		38	122			S S W 2	S W		89	121				E N		
30	Fairer	S W 4			42	149		Fair	S S W 2	S		89	150				E by		
					46	128						78	121			Cloudy	E 3		
	Rain	S S E 1	S by W		36	126	1. 04	Fair	E 1			60	115	0. 01			E by		
31		S 4			34	144													
	Fair				36	127	6. 63	Rain	W 2			73	129	8. 57					

Place this Pag. 494.

				65	130	0. 01					74	114		Fair				91	
	S by W 3			41	127		Cloudy	E 3			75	111			S 1	S W		85	
	SW by S 4	S by W		42	125		and	E by N 3			80	111		Same	SW by S 2			85	
				36	115	0. 34	Cool				85	93						86	
	W S W 3			44	106			E 1			89	79		Cloudy	SW by S 2	W S W		84	
	S by W 4	W		46	132		Firſt Ice	E 3			92	102		Mild	SW by S 3	W by S		82	
				38	116	0. . 16					93	83		Fair				78	
	S W 3			14	112	2. 57	Froſt	E 0			91	73		---Rain---	W 0	NW by W		75	
	SW b. W 4			21	128		and	E by S 1			91	98		Fair	N 1			83	
				21	116	1. 01	Fair				87	79						89	
	S W 3			05	103	0. 27		E 0			77	70		Froſt	N W 0	N by E		89	
	SW by S 6			07	122		Same	E by S 2	E		77	101		and	N W 0			90	
			28.	95	102						70	82		Fair				92	
	W by S 2	N N W	29.	08	100	0. 77	Cloudy	E 1	S W		51	85		Froſt	N W 0			86	
	W by S 3	W by N		26	121			S E 3	S W by S		32	111		and	N W 1			85	
				51	100	1. 07	Rain				07	109	1. 95	Cloudy	S W 1			83	
	W by S 1			75	88		Fair	S W 3			18	54	1. 04	Cloudy	S W 0			76	
							Cloudy												
			30.	00	101		---Rain---				16	96							
	S W 1			04	102	0. 06		W 1	NW by N		18	92	0. 90						
	W NW 1	N by W		10	130		Fair	N by W 3	N W		32	110		Rain					
	N by W 0			18	121			W NW 0			51	88							
	E S E 0	E N E		21	112		Froſt	W SW 0			51	82		Froſt					
	E by S 2			23	123			S 3			42	107		and					
				23	101		Cloudy	S W 1			43	111		Fair					
	N by W 1			16	100		Cloudy	S W 0			51	100							
	N by E 2			12	130			SW by S 1			51	114		hard Fro.					
				08	117		Rain	E S E 2			28	110	1. 24						
	E 0	E N E		12	117			S 3			08	117	0. 31						
	E by N 2			12	135		Rain	S S E 2	S		03	122		Snow					
	E N E 3			11	122	0. 29		W NW 3			16	96	0. 43						
	E by N 3			08	122			SW b. W 2			48	89		Snow					
	E 3	E by N		10	127		Fair												
	E by N 3			08	123						48	109		Fairer	N by E 2			60	
							Cloudy	S 4	S W		36	115	3. 12						
					Tot.	8. 06	Rain				14	113	13. 49						To

91	92		Thaw				23	91		
85	88		Cloudy	N W o	N		26	86		
85	106			N W 1			27	102		
86	109		Fair	*W* NW o			31	94		
84	112	0. 05	Milling	N by **W** o			36	90		
82	122			N by E 1			40	99		
78	112		Fairer				47	94	0. 03	
75	103	0. 45	Milling	N o	N E		50	89		
83				N 1			49	92		
89	85		Cloudy				46	85	0. 07	
89	80		Froft	N by W o			40	74		
90	91		Fog	N o			38	88		
92	75		Cloudy	S by E			35	86		
86	71			S W o			21	86		
85	90		Cloudy	SWbyS 2			19	94		
83	9[illegible]			S S W 1			15	91		
76	89		Fairer	S S W 1			14	98		
				SW*b.* W 1			12	102		
			Rain	S by W 1		29.	98	102		
			Cloudy	W o	NW b.W		96	107	0. 08	
				W 1	N W	30.	06	105		
			Fair				10	94		
				W by S 2	N N W	29.	95	86		
			Fair	N W 2			94	98		
				W by N o	N by W		94	91		
			Fog	*W* by N o			90	94		
				W by S o	NW b.W		86	108		
			Milling ---Rain---				80	106	0. 27	
				W by *N* 2			72	96	0. 58	
			Fair	*N W* 4			83	100		
						30.	03	82		
			Froft	*S W* 2			01	89		
			Cloudy	S *W* 3	W by S	29.	96	104		
60	60	0. 59	Rain				94	105	0. 24	
			Fairer	*S W* 3			93	110	0. 02	
				S W 3			92	112		
	Tot.	1. 93	Cloudy				95	108	5. 77	

Philoſoph. Tranſact. Numb. 262 Tab. 2.

A REGISTER *of the Weather, Bearing of the Winds, Flying of the Clouds, Height of the Mercury in the Barometer, and of the Spirits in the Thermometer, and the Quantity of Rain fallen at* Upminster, *in* Essex, *for the First Six Months of the Year 1699.*

January (6, 12, 9)

Day	Weather	Winds	Clouds	Barom.	Ther.	Rain
1	Frost Fair Snow Rain	S b E 0 S S E 1		29. 77 73 47		
2	Warmer and Rain	S 5 S b E 3		28. 31 78		0. 65 0. 29
3	Same	S 5 S b W 4	S by W	97 47		0. 37
4	Cloudy Fairer	S S W 3 S W 4 S W 4	W by W	44 39 72	101 109 108	
5	Frost and Sm Rain	S W 3 S 1		29. 33 24	85 94	
6	Rain Warm Snow	S 0 S 2		28. 67 61	104 105	0. 75 0. 48
7	Sm Frost Fair Rain	S W 2 SW b W 3 S by W 0	S by W S W	29. 02 08 10	85 86 85	0. 03
8	Frost and Fair	S W 0 W by S 1	W S W S W	34 46 70	85 86 85	
9	Sm Frost and Fair			79 78		
10	Same	S by S 1 S b E 1	S S E	82 82 60	85 83	
11	Cloudy	S W 2 SW b W 2	W S W W	55 59 71	101 99 102	0. 40
12	Cloudy Misling	S W by S 0 S W 2	W by S	69 66 59	102 109 111	
13	Fair Cloudy Rain	S W b W 3 W by S 3	W W by N	48 42 48	95 107 98	0. 26
14	Cloudy Rain	N by W 4	N by W	25 03	94 96	0. 16
15	Cloudy Day	N 1 N by W 1		30. 12 24 17	91 98 82	0. 26
16	Frost Cloudy	W by S 0	N by W	20 15	81 93	
17	Foggy	N W b W 0 N W 0		22 24 27	94 100 94	
18	Fog	W 0		20		
19	Fog			14	77	
20	Hard Frost Fair Foggy	S 0 S by E 1		07 14 1	79 79	
21	Hard Frost Fog Fair	S by E 0 E by N 1	E N E	28 18 18	62 81 81	
22	Frost and Fair	E by N 2 E by N 3	E by N	24 18 15	77 86 84	
23	Cloudy Fair Small Frost	N E 2		15 15	87 81	
24	Frost and Fair	E by N 0 E 2		15 14 1	78 88 79	
25	Frost and Fair Pleasant Day	E 0 E 1		11 15 09	73 86 79	
26	Same	E 0 E 1		05 29. 90	79 88	
27	Frost and Cloudy Fair	E N E 0 E by N 1	E	70 52 50	78 85 78	
28	Rain and Thaw	S E 2 S by E 2	S E by S S	48 47 66	89 95 98	0. 51
29	Frost Fair Rain	S W by S 0 S 1	W by N	86 87 75	85 92 98	
30	Cloudy Warm Day	S 2 S 3 S S W 3	S S by W S W by S	56 49 42	107 115 110	0. 82
31	Cloudy Rain	S by W 2 S 2 S S E 2	W S W S S E	49 37 47	108 119 109	0. 37 [illegible]

February (6, 12, 9)

Day	Weather	Winds	Clouds	Barom.	Ther.	Rain
1	Fair Pleasant Day	S W 1 W by S 2 W by S 0	S W	29. 47 51 71	98 108 89	
2	Small Rain Hasy Rain	W S W 0 S by W 0 S 2	W N W	88 91 85	75 95 100	0. 09
3	Rain Fair	S S E 3 S by W 3 S W b W 1	S by E W	55 58 64	110 109 97	0. 63
4	Small Frost Fair Cloudy	W S W 4 W 2 S 3	W N W N by W S W	76 86 78	[illegible]	
5	Cloudy Fair Rain	S W S W 4 W S W 3 W by S 2	W S W W W	48 5 48	[illegible] 91	0. 37
6	Small Frost Fair Same	W by N 1		76 51	85 97	
7	Violent Storm	W 2 W N W 1	W by N N W	28. 91 29. 21 78	100 101 97	0. 92
8	Cloudy Fair Cloudy	N W 2 S by W 2	N W by N N W	30. 98 29. 00 28	88 101 97	
9	Misling Rain	W S W 3	W by N	30. 39 09	100 87	0. 20
10	Hoar Frost Somewhat Fair	S W 2 W 3	N N W N	02 09 01	88 [illegible] 95	
11	Cloudy Fairer	W by S 1 S W 1	N W W by N	29. 98 96 98	85 107 90	
12	Fair Hasy Cloudy Rain	S W 1 S W 1 1	N by W N W	94 84 46	84 102 100	
13		W S W 4	W	34	107	0. 02
14						
15						
16	Rain Cloudy	E by N 0	N E	37 58	100 97	0. 91
17	Rain Cloudy	E by N 0 E by N 1	W by S	79 2 81	92 105 94	
18	Rain Fair and Pleasant	W N W 4 N W 3		64 93 80	98 110 69	0. 09
19	Rain Fair	W by S 3 W by N 4		72 77 94	87 104 99	0. 25
20	Frost and Fair	W S W 1		29. 00 29. 98	85 97	
21	Cloudy Fairer	W S W 1 W by N 1	W N W	04 73 91	77 110 90	
22	Cloudy Sleet Cold	W by S 2 N W 3	W N W	81 73 70	86 100 72	0. 03
23	Hard Frost Fair Snow	N W 1		85 50	75 86	
24	Cloudy Blustering Hazel	N N W 4		0 01	93 81	0. 40
25	Fair Cloudy	N W by W 1 S W b W 3	N W	94 82 75	83 102 97	
26	Fair and Pleasant	W 2 W by N 1	W N W	77 80 78	86 104 99	0. 08
27	Rain Fair	W by S 2 S W b W 3	W by N	66 69 78	88 97 99	0. 45
28	Cloudy	S W 3	W	98	99	0. 10
					Tot.	6 05

March (6, 12, 9)

Day	Weather	Winds	Clouds	Barom.	Ther.	Rain
1	Fair Sleet	N by E 3		29. 27	80	0. 12
2	Snow Fair	N by W 3		40 64	82 80	0. 04
3	Hard Frost Fair Cloudy	N W b N 0 W 1 W by S 1	N W	23 73 78	61 96 96	
4	Cloudy Rain Cloudy	N by W 0 N 2 N 3	N N E	30. 8 94 08	[illegible] 98	0. 02
5	Frost Cloudy Fairer	N W 0 N by E 1 N by W 1	N N by W	21 25 19	79 94 77	
6	Hard Frost Fair Cloudy	N N W 0 E 2 S by E 0	N by E	29. 11 05 99	69 96 87	
7	Fair Cloudy	S E 1 N E by S 0	S by E S E	8 87 58	82 109 89	
8	Fair	E N E 1 E by N 1	N E by E	30. 07 06 18	89 83	
9	Frost and Cloudy	N E 0 E N E 1		13 13 14	85 87 83	
10	Cloudy	N by E 0 N by E 1	E	10 11 06	85 101 91	
11	Small Rain	N by N 0 S by W 1	S	29. 00 97 93	84 103 97	0. 44
12	Cloudy	S 4 S by W 4		84 84 78	95 106 97	0. 18
13	Rain Fairer	S by W 3 S by E 2		65 58 65	93 107 88	0. 03 0. 62
14	Frost Fair Cloudy	W 0		81 82	81 106	
15	Cloudy	S W by S 2	W by S	30. 87 01	107 106	
16	Cloudy Fair Cloudy	S W 1 S W 2	W S W	29. 04 02 97	111 127 110	
17	Fair Hail	S 1	S by W	30. 84 88	108 100	0. 08
18	Small Rain Fair and Pleasant	S W 0 W 2		89 88 09	78 112 94	
19	Rain Cloudy	S W by S 3 S W 4		78 77 68	98 115 103	
20	Cloudy Fair Cloudy	S W S W 3 W by S 4	W S W	67 56 48	110 117 100	0. 03
21	Fair Rain	S W 3	W by S	38 49	99 90	0. 25
22	Hoar Frost Fair Cloudy	W S W 1 S W 2	W	50 53 53	84 118 98	
23	Rain	S by E 3 S 3	S by W	40 51 25	104 118 112	0. 46
24	Cloudy Fair Thunder Rain	S by W 2 S 4	S S W	07 01 06	100 115 100	0. 97
25	Cloudy Fair	S W 3 W 2	W	49 51 58	99 127 96	0. 59
26	Hoar Frost Fair Rain	S W 0 S by W 2		55 41 46	83 117 102	0. 05
27	Fair Rain and Hail	S 0 S 0	W S W	49 37 54	86 121 98	0. 41
28	Rain	S S E 0 N N W 1		43 71	92	
29	Fair Rain Fair			27	96	0. 80
30	Cloudy Fair	W by E 0 W S W 3	W	30 28 20	75 102 96	
31	Cloudy Fair Rain	W N W 4 N N W 2 N W 2		20 25 45	98 102 96	0. 24 5. 68

April (6, 12, 9)

Day	Weather	Winds	Clouds	Barom.	Ther.	Rain
1	Rain and Hail	W by N 1 N 4	N W	29. 17 39 32	78 102 110	0. 27
2	Same	N N W 3 N 2 N by E 3	N E	54 55 6	94 103 110	0. 14
3	Cloudy	N 2 N E b N 3 N by E 3	N E by N N E by N	8 8 78	88 111 94	
4	Rainy Day	N by E 2 N E 4 N by E 2	N E	85 90 92	90 107 100	
5	Frost and Fair Cloudy	N by E 0 N E 2		85 75 69	82 113 92	
6	Cloudy	E by N 0 E S E 1	N S	55 48 43	95 112 95	
7	Cloudy Cold Fair	S E by E 0 E 1	N E	33 55 28	85 98	
8	Cloudy with some Drops	N 2 N by W 1		15 22 15	94 102 98	
9	Cloudy Rain	S 0 S 2	N W S W	15 15 18	97 115 97	0. 50
10	Fair Cloudy	S by W 0 S 1	S W	32 34 43	95 124 106	
11	Rain	N 2 N 5	N N E	46 48 54	95 101	0. 07
12	Cloudy	N E 3 N E 4		59 70 82	105 123 99	0. 31
13	Cloudy Fair Cloudy	N E		97 86	97	
14	Cloudy Fair Rain	N E by E 2 E N E 3	S	8 83 90	12 121 108	0. 12
15	Cloudy Rain Fairer	N E b N 1 S W 2	S W	84 81 4	105 118 116	0. 01 0. 37
16	Cloudy Fair	S by W 1 S 2		58 90 28	101 109 109	
17	Rain Fair	W S W 2		8	103 97	0. 12
18	Hoar Frost Fair Rain	S W 1 1		34 34	81 100	
19	Fairer Cloudy	S 2 W by N 1		23 4 64	113 117 110	0. 02
20	Hoar Frost Fair	W 0		39 84	87 113	
21	Cloudy Warm and Fair	S S W 2 S W 2	S W	85 94 58	100 121 115	
22	Cloudy Fairer	W S W 0 W by S 2	W	30. 00 29. 97	97 120 110	
23	Fair and Pleasant	S W b W 2 W S W 3	N W	95 97 82	104 118 113	
24	Fair	S S W 3	W S W	74 66	109 110	
25	Fair Rain	S W b W 3	W	64 37	110 105	
26	Fair Cloudy	S W b W 4 W 4	W	12 14 14	99 123 100	0. 71
27	Fair Rain Cloudy	S W 2 W by S 1		39 36 41	97 104 105	0. 08
28	Fair Drops of Rain	W by N 2 N 2 E 2	N by W E by N	32 64 77	89 112 101	
29	Rain Frost Fair Cloudy	N E 0 E 1 E 0	N by E	85 81 79	99 119 104	
30	Cloudy Fair Cloudy	E 0 S by W 1 N E by N 1	N by W N W by W	79 70 85	104 125 117	
					Tot. [illegible]	44

May (6, 12, 9)

Day	Weather	Winds	Clouds	Barom.	Ther.	Rain
1	Fair	W by S 1 N W 2	N W	29. 84	112 138	
2	Fair Dry Rain	S by W 3		65	119	
3	Cloudy Showers	S W b W 2 W S W 3 W 3		47 38 55	120 118 100	0. 94 0. 19
4	Fair Rain	S W 1		54 11	103 97	0. 66
5	Fair Thunder Rain	W by S 2 S W 3		47 3 47	90 118 98	0. 29
6	Hoar Frost Fair Showers	S S W 1 S W 3		31 58 65	96 121 107	0. 08 0. 01
7	Fair	S by W 0 S by E 2	S	77 83 85	98 117 108	
8	Fair	S 1 S 2		90 93	102 143	
9	Fair and Warm	E 1		93	125	
10	Same	N E 2 N by E 1		61 82 92	99 147 118	
11	Same	N by E 3 N 2		30. 00 00 21	117 150 118	
12	Fair and Dry	N by W 2 N 4		17 16 10	105 122 118	
13	Same	N by E 3 N N E 4		10 08 00	110 135 116	
14	Cloudy Windy	N N E 2 N by E 2 N 2	N N E	29. 99 99 00	110 129 112	
15	Same	E N E 2	N E	29. 98 98	110 100	
16	Cloudy Fair Cloudy	N E by E 2 E N E 3	E N E	22 12 8	116 132 120	
17	Cloudy	E N E 2 N E by E 3		32 21 24	113 127 112	
18	Fair and Hot Day	N E by N 2		69 77	125 126	
19	Fair	N 2 N E by E 3 E by S 0	N by E	8 8 88	119 146 110	
20	Same	N E 2 E by S 2		72 86 8	[illegible] 147	
21	Cloudy Hot and Fair	N N E 2 E by N 2 N E 3		[illegible] 79 74	112 148 120	
22	Fair Hot and Dry	N E 2		70 68	130 126	
23	Cloudy Fair	N E by N 2 E 1 E 1	N by E N W	66 59 49	119 134 121	
24	Rain Fair	N N E 3	N by E	69 50	117 145	0. 08
25	Fair Hot Fair	N N W 2 N by W 2 E by S 0	N by W	42 35 37	121 150 107	0. 62
26	Fair Rain Fairer	E by S 2 S W 2 W 0	N by W W by S	39 37 65	104 138 113	0. 10
27	Fair Cloudy Fair	S W 1 S W 1 S 0	S	62 65 66	109 140 122	0. 08
28	Fair Sultry	E 1 E 0 E 0	S E S E S E	69 57 58	123 150 131	
29		E 0	N W	65	124	0. 09
30						
31	Hot and Dry	W by S 2		30. [illegible]	[illegible]	[illegible] 47

June (6, 12, 9)

Day	Weather	Winds	Clouds	Barom.	Ther.	Rain
1	Very Dry Hot Day	S W 2	W by S	30. 0 00	132 128	
2	Fair Rain	S W by S 0	W by S 0	29. 98 85	132 134	0. 11
3		W 2		90	133	
4						
5						
6	Fair and Dry	W by S 2		73	120	
7		W by S 3 W 2	W by N	78 81	132 142	
8						
9	Great Drought					
10	Cloudy Fair	W by N 2 W 0	N W W by N	67 73	146 145	0. 53
11	Fair Hot Cloudy	W by S 1 E 0		77 87	110 128	
12	Hot and Very Dry	E 2 E by S 0	S by S	80 81	139 140	
13	Fair Rain	E 2 E by S 2 S 1	S E by S S by E	70 77 70	152 148 136	0. 04
14		S S W 2 W by W 4	S W by S	80 90	[illegible] 154	
15–19						
20	Some Cloudy some Fair	W N W 1 W N W 0	N W by N	88 92	148 128	0. 04
21		W 0 E 2	N N W N W	94 98	130 163	
22						
23	Fair Hot Dry	S E 2		93 93	165 148	
24	Fair Sultry Rain	S E 1 N by W 2 E 1	W	94 94 91	149 165 14	0. 20
25	Fair Hot Day	[illegible] W by S 2 S W by W	W by N	85 85 82	140 146 144	
26	Fair	S 2 N W 2	W by N	70 84	142 136	
27	Same	N W 2 S 0	N W by N W	30. 98 29. 01 90	130 158 135	
28	Same	W S W 2 W N W 2	W W	90 91 98	139 160 125	
29	Same	W N W W by S 2		0 95 93	140 143 135	
30	Same	N W by W 2 N W by W 3 E 1	N W N	95 97 97	135 162 139	
					Tot.	[illegible] 40

Place this Pag. 494.

A REGISTER of the Weather, Bearing of the Winds, Flying of the Clouds, Height of the Mercury in the Barometer, and of the Spirits in the Thermometer, and the Quantity of Rain fallen at Upminſter, *in* Eſſex, *for the Laſt Six Months of the Year* 1699

July

Day	Weather	Winds	Clouds	Barom.	Ther.	Rain
1	ſwelling Hot and Fair	NE by E 1 E S E 2	N	30	70	00
2	Fair and Hot	E S E 2 N E 1		29. 30	70	00
3	Same	E 1 E 2		30	71	00
4	Fair Cloudy Fair	E by N 1 NE by N 1		30	74	00
5	Fair Cloudy	N 2 N 1	N N E	30	75	00
6	Cloudy	N by E 2 N N E 2		30	69	00
7	Fair	NE by N 1 E 1	E by N	30	68	00
8	Fair and Hot	E by S 1 W N W 1 N W by N	W by N	30	71	00
9	Same	N by W 1 N W by W 1	N W	30	68	00
10	Same	W		29	68	00
11	Hot and Dry	W by S 1 W by N 1	N W	30	64	00
12	Sultry Hot Cloudy	E by N 1 E N E 1		30	68	00
13	Very Hot and Dry	E by S 1 E S E 1	E by E	30	68	00
14	Sultry Rain and Thunder	E 1 E by S 2	E by N	30	68	00
15	Cloudy Fair and Dry	N E 1 N E 2	N	30	64	00
16	Fair Hot and Dry	N E 2 E 2	N E	30	68	00
17	Same	E by N 1 E by N 2		30	68	00
18	Cloudy Cool Dry	N by E 3 N 2		30	68	00
19	Same	N 2 N 1		30	68	00
20	Rain Cloudy and Cool	N N W 2 N W by N 2		30	68	00
21	Cloudy Fair	N N W 1 N N W 1	N N E	30	68	00
22	Fair	N 1 W by S 2 N W 2		30	68	00
23	Cloudy	N E 2		30	68	00
24	Rain Storm Drops	S 2		30	68	00
25	Fair	S E 1	S	30	68	00
26	Rain	S E 2	S	30	68	00
27	Fairer Rain Fair	S 1 S 3	S W S W	30	68	00
28	Fair	S W by W 2 S 4	W by S S W 2	30	68	00
29	Same	S W 4	S W	30	68	00
30	Fair Rain	S by W 3 S W by S 4	S W	30	68	00
31	Rain Fair	S S E 2	S by W	30	68	00

August

Day	Weather	Winds	Clouds	Barom.	Ther.	Rain
1	Fair Rain Cloudy	S by W 4 S W by S 4 W by S 2	S W	29. 30	68	00
2	Fair Cloudy	W by S 1 W S W 1	W by S	30	68	00
3	Cloudy	N N W 3	W S W	30	68	00
4	Fair			30	68	00
5	Cloudy Rain Cloudy	N N W 1 E by S 2	W by S W by N	30	68	00
6	Rain Fairer	E by S 1 S W 2	W by S W	30	68	00
7	Showery	S 2		30	68	00
8	Fairer	S W 4		30	68	00
9	Rain			30	68	00
10	Fair Cloudy	S W 4 S W 3		30	68	00
11	Fair Cloudy Rain	S W 3 S W 3	S W	30	68	00
12	Fair	S 1 S 3	S W	30	68	00
13	Cloudy Rain	N W 1 W by N 1	W by S	30	68	00
14	Cloudy Fair	S S W 3	N W	30	68	00
15	Rain	N W 1 N W by N 1		30	68	00
16	Fair	N N W 2		30	68	00
17	Cloudy	N by W 1 N 2	N N E	30	68	00
18	Cloudy	N 2 N by E 1	N N E	30	68	00
19	Rain Cloudy Fairer	N E 1 N E by N 1		30	68	00
20	Cloudy			30	68	00
21	Fairer	N E 1	E by N	30	68	00
22	Mift	N N E 1 W by N 1		30	68	00
23	Fair			30	68	00
24	Mifty Fair Cloudy	E by W 3 S 1	S by W	30	68	00
25	Cloudy	S W 4	S W	30	68	00
26	Fair Cloudy	S W 1 S W 3	S W	30	68	00
27	Fair	S W 1 S W by S 2	W by S	30	68	00
28	Rain	S W by S 4	S W	30	68	00
29	Cloudy	S W 4 S W by S 4	S W by W	30	68	00
30	Rain	S W 1 S W by S 2	S W	30	68	00
31	Fair	E 2		30	68	00
	Rain	W 1		29	68	57

September

Day	Weather	Winds	Clouds	Barom.	Ther.	Rain
1	Mift	S W by S 2 S W by S 2		29	68	00
2	Fair	S 1	S by E	30	68	00
3	Cloudy	S E 1	S by E	30	68	00
4	Same	S S E 2 N W by N 1		30	68	00
5	Fairer Rain	S E 2	S W	30	68	00
6	Fairer Cloudy	E by S 2 S E 1	S W	30	68	00
7	Fair	N E by N 2 S 1	N E	30	68	00
8	Mift	N 1 S 1	E	30	68	00
9	Fairer Mift	E 1 S E 1	E	30	68	00
10	Fair	E 2		30	68	00
11	Mift Fair Cloudy	E 1 N E 2	N N E	30	68	00
12	Mift Fair Cloudy	E 1 E 2		30	68	00
13	Mifting Fair Cloudy	N by E 2 E N E 3	N E	30	68	00
14	Fair	N 1	N E by N	30	68	00
15	Fair	E 2		30	68	00
16	Mift	E 1 E 2		30	68	00
17	Fair	E 1		30	68	00
18	Mift Fair Cloudy	E 1 E by N 1		30	68	00
19	Fair	E 1		30	68	00
20	Cloudy	E by N 1		30	68	00
21	Fair Cloudy	E 1 E by N 1		30	68	00
22	Fair	E 1 E by N 2		30	68	00
23	Same	E by N 1		30	68	00
24	Same Very Dry	E 1		30	68	00
25	Rain	S W by S 2 S W 1	S by W	30	68	00
26	Rain	S 1 S E 1	S by E	30	68	00
27	Fair	E 1 E 2	E by E	30	68	00
28	Fair	E 1 E 2	E by E	30	68	00
29	Cloudy	N E 1 E by N 2		30	68	00
30	Same	N E 2 E by N 3		30	68	00
	Cloudy and Cool	E 3 E by N 3		30	68	00

October

Day	Weather	Winds	Clouds	Barom.	Ther.	Rain
1	Fair Cloudy	E by N 1 E 2	E	29	68	00
2	Rain Fairer Fairer Cloudy	E 2 E by N 1		30	68	00
3	Rain Fairer Cloudy	E by S 2 S E 2	S W	30	68	00
4	Cloudy	S W		30	68	00
5	Fair			30	68	00
6	Hoarfrost Fair	N N W 1 N 2		30	68	00
7	Cloudy Rain Cloudy	N W 2 W by N 1		30	68	00
8	Fair	N E by N 1		30	68	00
9	Cloudy	E by N 2		30	68	00
10	Same	E by N		30	68	00
11	Mift	E by N 1		29	68	00
12	Fair	E 1		30	68	00
13	Mift Cloudy Mifting	E 1		30	68	00
14	Cloudy Rain	S E by E 1 S 2		30	68	00
15	Rain	S by E 1 E by S 1		30	68	00
16	Fair	E 1 E 2	E by E	30	68	00
17	Cloudy	N E 1 E by N 2		30	68	00
18	Same	N E 2 E by N 3		30	68	00
19	Cloudy and Cool	E 3 E by N 3		30	68	00
20	Fair hot	E 3		30	68	00
21	Froft and Fair	E 2 E by S 1		30	68	00
22	Same	E 2 E by S 2		30	68	00
23	Cloudy	E 1 S E 3	S W by S	30	68	00
24	Fair Cloudy	S W 3		30	68	00
25	Rain	W by N 1 N W by N 1	N W by N	30	68	00
26	Fair	N by W 3 W N W 1	N W	30	68	00
27	Froft	W S W 2		30	68	00
28	Cloudy	S W 3		30	68	00
29	Cloudy	S W by S 2 S W by S 1	S W	30	68	00
30	Rain	S by E 1 S E 2	E	30	68	00
31	Rain	S W by N 1 W N W 1		30	68	00

November

Day	Weather	Winds	Clouds	Barom.	Ther.	Rain
1	Fair	W 3 W by N 4	W S W	29. 30	68	00
2	Rain Fairer Fairer	S W by W 1	W S W	30	68	00
3	Frofty Cloudy Snow	S by W 1	W	30	68	00
4	Rain	E 3 E by S 3		30	68	00
5	Cloudy	S E 3	S E	30	68	00
6	Fair Rain Fairer	S W 3	W S W	30	68	00
7	Fair Cloudy Fair	S W 4 S W 3	N N W W	30	68	00
8	Fair	S E 1 S E 1	S	30	68	00
9	Rain Fair Rain and Warm	S E 1 S 2 S 4	S by W	30	68	00
10	Cloudy and Warm	S 1		30	68	00
11	Fair	S W 2		30	68	00
12	Mift	W 1 W 2		30	68	00
13	Cloudy	S by E 1 S E 2		30	68	00
14	Frofty and Foggy	E 1 N E by E 1		30	68	00
15	Mift Cloudy Rain Cloudy	N N E 1 E by N 1	S W by S S W by W	30	68	00
16	Cloudy	S W 1 S W 1	W by W	30	68	00
17	Cloudy Fair Cloudy	S W 1 S W 3		30	68	00
18	Fair	W S W 1 W by S 2		30	68	00
19	Stormy Fair	W by N 1 W by S 2		30	68	00
20	Cloudy Mifting Fair	W 1 S W 3	N W	30	68	00
21	Cloudy Fair	W by N 2	N W	30	68	00
22	Rain	W by S 2 W by W 2	W N W	30	68	00
23	Fair	N W 3 W 1	W	30	68	00
24	Fair	W S W W S W 3		30	68	00
25	Fair	S W by W 1	N W	30	68	00
26	Frofty and Fair	S by W 1 S W 1		30	68	00
27	Same	S W by S 2		30	68	00
28	Cloudy Mild Rain	S W by S 1 S W by S 2	W S W W by S	30	68	00
29	Fair	W	N W by W	30	68	00
30	Fair	N 1		30	68	00

December

Day	Weather	Winds	Clouds	Barom.	Ther.	Rain
1	Cloudy Rain Fairer Fairer	N W 1 N W 2		29.	68	00
2	Frofty Cloudy Snow	E by S 3 E 4		30	68	00
3	Rain	E 3 E by S 3		30	68	00
4	Cloudy	S E 3	S E	30	68	00
5	Fair Rain Fairer	S by E 1 S 3	S by W S S W	30	68	00
6	Rain Rain and Warm	S by E 3	S by W	30	68	00
7	Cloudy and Warm	S E 1 S E 3	S by E	30	68	00
8	Cloudy Mifting Warm	E 2 S E 1		30	68	00
9	Rain	E 2 S E 1		30	68	00
10	Fair	S by E 2 S by E 1		30	68	00
11	Fair	E W 2		30	68	00
12	Cloudy Rain Cloudy Some Rain	S by E 2	by W W	30	68	00
13	Cloudy	S W 3 S W by W 1		30	68	00
14	Fair Rain	S W by W 1 W by S 2	W by S	30	68	00
15	Fair	W N W	N N W	30	68	00
16	Cloudy Mifting Rain	N N W 2 N N W 1		30	68	00
17	Fair	N W 2		30	68	00
18	Frofty and Hazy Fair	N W 1		30	68	00
19	Cloudy with Thaw	W 3 N W 3	N W	30	68	00
20	Cloudy Fair	N W 1 N W W 1	N	30	68	00
21	Mifting Fair	N by W 1 N by E 1		30	68	00
22	Fairer	N		30	68	00
23	Mifting Fair	N W by N 1	N E	30	68	00
24	Cloudy	N 2		30	68	00
25	Frofty Fair Cloudy	N by W 1 N 1		30	68	00
26	Cloudy Rain Cloudy	S W by S 2 S W by S 1	S by W	30	68	00
27	Fair Cloudy Rain	S S W 1 S W by W 1 S by W 1		30	68	00
28	Cloudy Fair	W 1	N W by N N W	30	68	00
29	Fair Frofty Cloudy Rain	W by S 2 W by N 1 W by S 2	N N W N by W W by S	30	68	00
30	Fair	N W 4		30	68	00
31	Frofty Cloudy Rain	E 3 S W 3	W by S	30	68	00
	Fairer Cloudy Rain	S W 3 W 3		30	68	00

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